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FILE 'CAPLUS' ENTERED AT 14:52:23 ON 28 APR 2004 L44 S L3

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L1 HAS NO ANSWERS

STR

Structure attributes must be viewed using STN Express query preparation.

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ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
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2003:434369 CAPLUS AN

DN 139:26620

TT

Topical pharmaceuticals comprising an immune response modifier Skwierczynski, Raymond D.; Busch, Terri F.; Gust-Heiting, Amy L.; Fretland, Mary T.; Scholz, Matthew T. IN

PΑ 3M Innovative Properties Company, USA

LA

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PCT Int. Appl., 123 pp.
SO
       CODEN: PIXXD2
DT
       Patent
       English
FAN.CNT 1
                                                             APPLICATION NO.
                                                                                    DATE
       PATENT NO.
                               KIND DATE .
                               ____
                                                             WO 2002-US38190 20021127
                               A1 20030605
       WO 2003045391
PΙ
            W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
                  CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES,
                  FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
                  MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY
            RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
                   NE, SN, TD, TG
                                                             US 2002-306019 20021127
       US 2003199538
                                A1
                                        20031023
PRAI US 2001-340605P
                                Р
                                        20011129
       US 2002-378452P
                                        20020506
                                 Р
       MARPAT 139:26620
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GΙ

Pharmaceutical formulations comprise an immune response modifier (IRM) AB chosen from imidazoquinoline amines, imidazotetrahydroquinoline amines, imidazopyridine amines, and other heterocyclic fused ring derivs.; a fatty acid; and a hydrophobic, aprotic component miscible with the fatty acid are useful for the treatment of dermal associated conditions. Topical formulations containing, e.g., I are provided. In one embodiment, the topical formulations are advantageous for treatment of actinic keratosis, postsurgical scars, basal cell carcinoma, atopic dermatitis, and warts.

434285-66-2 534568-82-6 534568-85-9 534568-87-1 534568-88-2

Ι

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (topical pharmaceuticals comprising an immune response modifier)

RN

434285-66-2 CAPLUS
1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[5-(methylsulfonyl)pentyl]-CN (9CI) (CA INDEX NAME)

534568-82-6 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(1methylethyl)sulfonyl]ethyl]- (9CI) (CA INDEX NAME)

534568-85-9 CAPLUS RN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(methylsulfonyl)ethyl]-2-propyl-CN (9CI) (CA INDEX NAME)

534568-87-1 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-[(1-CN methylethyl)sulfonyl]butyl]- (9CI) (CA INDEX NAME)

534568-88-2 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(ethylsulfonyl)butyl]-(9CI) (CA INDEX NAME)

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 8 ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN L4

2003:417574 CAPLUS AN

DN 139:929

Toll-like receptor (TLR) pathway-based methods for identification of ΤI immune response modifier (IRM) compounds, and methods of use of such compounds

Gorden, Keith B.; Qiu, Xiaohong; Tomai, Mark A.; Vasilakos, John P. IN

3M Innovative Properties Company, USA

PCT Int. Appl., 66 pp. SO CODEN: PIXXD2

DT

Patent

LA English FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE ____ 20030530 WO 2002-US36758 20021114 PΙ WO 2003043572 A2 WO 2003043572 A3 20030724

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
           LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
           PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
           RU, TJ, TM
     RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
           CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
           NE, SN, TD, TG
US 2004014779
                          A1
                                  20040122
                                                        US 2002-294935
                                                                                 20021114
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PRAI US 2001-332412P Ρ 20011116

Methods for identifying a compound that activates a TLR-mediated cellular signaling pathway is disclosed. The method includes (a) exposing a TLR-pos. cell culture to a test compound and measuring a TLR-mediated cellular response; (b) exposing a TLR-neg. cell culture to a test compound and measuring a TLR-mediated cellular response; and (c) identifying the test compound as an IRM if the cellular response in the TLR-pos. cell culture is greater than the cellular response of the TLR-neg. cell culture. Methods of eliciting a TLR-mediated cellular response are also disclosed. Such methods include administration of an IRM compound to an IRM-responsive cell so that the IRM compds. affects at least one TLR-mediate cellular signaling pathway.

434285-67-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(toll-like receptor pathway-based methods for identification of immune response modifier compds., and methods of use of such compds.)

434285-67-3 CAPLUS RN

 $1 \\ H-Imidazo[4,5-c] \\ quinolin-4-amine, \\ 2-ethyl-1-[5-(methylsulfonyl)pentyl]-1 \\ H-Imidazo[4,5-c] \\ quinolin-4-amine, \\ q$ CN (9CI) (CA INDEX NAME)

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ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
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2003:414123 CAPLUS ΑN

139:6869 DN

ΤI Preparation of thioether substituted imidazoquinolinamines as cytokine biosynthesis inducers for treatment of viral and neoplastic disease.

Bonk, Jason D.; Dellaria, Joseph F.; Merrill, Bryon A.; Radmer, Matthew R.

3M Innovative Properties Co., USA PA

SO U.S. Pat. Appl. Publ., 57 pp., Cont.-in-part of U.S. Ser. No. 13,059. CODEN: USXXCO

DT Patent

English LA

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		PATENT NO.				KIND		DATE			Α	APPLICATION NO.				DATE			
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Ρ	ÌΙ	US 2003100764			A1		20030529			U.	US 2002-165222				20020607				
US 666			6667	312		B	2	2003	1223										
		US 2002173655 US 6664264 WO 2003050121			A1		20021121			US 2001-13059					20011206				
					. В	2	2003	1216											
					A1		20030619			WO 2002-US18290					2002	0607			
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				CN,	CO,	CR,	CU,	CZ,	CZ,	DE,	DE,	DK,	DΚ,	DM,	DZ,	EC,	EE,	EE,	ES,
				FI,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,
				KΡ,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,
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				AM,	AZ,	BY,	KG												
			RW:	GH,	GM,	KE,	LS.	MW.	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,

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CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 072858 Al 20040415 US 2003-675833 20030930

US 2004072858 A1 20040415 PRAI US 2000-254218P P 20001208 US 2001-13059 A2 20011206

US 2001-11921 A1 20011206

OS MARPAT 139:6869

GΙ

AB Title compds. [I; X = CHR3, CHR3A; A = alkyl, alkenyl; Z = S, SO, SO2; R = alkyl, alkoxy, OH, halo, CF3; R1 = alkyl, aryl, heteroaryl, heterocyclyl, alkenyl, R4Ar; Ar = aryl, heteroaryl, heterocyclyl; R2 = H, (substituted) alkyl, alkenyl, Ar, etc.; R3 = H, alkyl; R4 = alkylene, alkenylene; n = 0-4], were prepared Thus, 2-butyl-1-[4-(methylthio)butyl]-1H-imidazo[4,5-c]quinolin-4-amine in CHCl3 was treated with 3-chloroperbenzoic acid over 15 min. followed by stirring at ambient temperature for 5 min. to give 2-butyl-1-[4-(methylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine. The latter showed interferon and tumor necrosis factor induction in human blood cells with lowest effective concns. of 0.01 and 0.04 μM, resp. I pharmaceutical compns. are claimed.

434285-63-9P 434285-66-2P 534582-84-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of thioether substituted imidazoquinolinamines as cytokine biosynthesis inducers for treatment of viral and neoplastic disease) 434285-63-9 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(phenylthio)butyl]- (9CI) (CA INDEX NAME)

RN

CN

RN 434285-66-2 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[5-(methylsulfonyl)pentyl]-(9CI) (CA INDEX NAME)

434285-55-9P, 2-Butyl-1-[4-(phenylthio)butyl]-1H-imidazo[4,5c]quinolin-4-amine 434285-56-0P, 2-Butyl-1-[2-(phenylthio)ethyl]-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-4-amine dihydrochloride 434285-57-1P, 2-Butyl-1-[4-(phenylsulfonyl)butyl]-1H-imidazo[4,5c]quinolin-4-amine 434285-58-2P, 2-Butyl-1-[4-(methylthio)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-59-3P, 2-Butyl-1-[4-(methylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-60-6P, 1-[2-(Phenylthio)ethyl]-1H-imidazo[4,5-c]quinolin-4amine 434285-61-7P, 1-[4-(Phenylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-62-8P, 1-[4-(Methylsulfonyl)butyl]-1Himidazo[4,5-c]quinolin-4-amine 434285-64-0P, 1-[4-(Methylthio)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-65-1P, 2-Butyl-1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5c]quinolin-4-amine **434285-67-3P**, 2-Ethyl-1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-68-4P, 1-[5-(Methylsulfonyl)pentyl]-1H-imidazo(4,5c]quinolin-4-amine 434285-69-5P, 2-Hexyl-1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine **434285-70-8P**, 2-(2-Methoxyethyl)-1-[5-(methylsulfonyl)pentyl]-1Himidazo[4,5-c]quinolin-4-amine 434285-71-9P, 2-Butyl-1-[5-(methylthio)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-72-0P, 2-Butyl-1-[5-(methylsulfinyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-73-1P, 2-Butyl-1-[3-(methylsulfonyl)propyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-74-2P, 2-Butyl-1-[3-(phenylsulfonyl)propyl]-1H-imidazo[4,5c]quinolin-4-amine 434285-75-3P, 2-Butyl-1-[2-(phenylthio)ethyl]-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-4-amine 534568-82-6P , 2-Butyl-1-{2-[(1-methylethyl)sulfonyl]ethyl}-1H-imidazo{4,5-c]quinoline-4-amine 534568-85-9P, 1-[2-(Methylsulfonyl)ethyl]-2-propyl-1Himidazo[4,5-c]quinolin-4-amine 534568-87-1P, 2-Ethyl-1-[4-[(1-methylethyl)sulfonyl]butyl]-1H-imidazo[4,5-c]quinoline-4amine 534568-88-2P, 2-Ethyl-1-[4-(ethylsulfonyl)butyl]-1Himidazo[4,5-c]quinoline-4-amine 534582-66-6P, 1-[5-(Methylsulfonyl)pentyl]-2-propyl-1H-imidazo[4,5-c]quinolin-4-amine **534582-67-7P**, 2-Methyl-1-[3-(methylthio)propyl]-lH-imidazo[4,5c]quinolin-4-amine 534582-68-8P, 2-Methyl-1-[3-(methylsulfonyl)propyl]-1H-imidazo[4,5-c]quinolin-4-amine 534582-69-9P, 2-Ethyl-1-[3-(methylthio)propyl]-lH-imidazo[4,5c]quinolin-4-amine **534582-70-2P**, 2-Ethyl-1-[3-(methylsulfonyl)propyl]-1H-imidazo[4,5-c]quinolin-4-amine **534582-71-3P**, 2-Methyl-1-[4-(methylthio)butyl]-1H-imidazo[4,5c]quinolin-4-amine 534582-72-4P, 2-Methyl-1-[4-(methylsulfinyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 534582-73-5P, 2-Ethyl-1-[4-(methylthio)butyl]-1H-imidazo[4,5c]quinolin-4-amine 534582-75-7P, 2-Ethyl-1-[4-(methylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 534582-77-9P, 1-[4-(Methylsulfonyl)butyl]-2-propyl-1H-imidazo[4,5c]quinolin-4-amine 534582-79-1P, 2-Butyl-1-[4-(methylsulfinyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 534582-81-5P, 2-Methyl-1-[2-(methylthio)ethyl]-1H-imidazo[4,5c]quinolin-4-amine **534582-82-6P**, 2-Methyl-1-[2-(methylsulfonyl)ethyl]-lH-imidazo[4,5-c]quinolin-4-amine 534582-86-0P, 2-Ethyl-1-[2-(methylsulfonyl)ethyl]-1H-imidazo[4,5c]quinolin-4-amine 534582-89-3P, 2-Butyl-1-[4-[(2,4difluorophenyl)thio]butyl]-1H-imidazo[4,5-c]quinolin-4-amine

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534582-93-9P, 2-Butyl-1-[4-[(1,1-dimethylethyl)thio]butyl]-1H-
imidazo[4,5-c]quinoline-4-amine 534582-94-0P,
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c]quinolin-4-amine 534585-94-9P, 2-Methyl-1-[4-[(1-
methylethyl)sulfonyl]butyl]-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-4-
amine 534585-96-1P, 2-Methyl-1-[4-[(4-
 fluorophenyl)sulfonyl]butyl]-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-
 4-amine 534585-98-3P, 2-Methyl-1-[4-[(1,1-
dimethylethyl)sulfonyl]butyl]-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-
 4-amine 534588-03-9P, 2-Ethoxymethyl-1-(4-methanesulfonylbutyl)-
 6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-4-amine
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
      (preparation of thioether substituted imidazoquinolinamines as cytokine
     biosynthesis inducers for treatment of viral and neoplastic disease)
 434285-55-9 CAPLUS
 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(phenylthio)butyl]- (9CI)
 (CA INDEX NAME)
```

RN 434285-56-0 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-6,7,8,9-tetrahydro-1-[2-(phenylthio)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 434285-57-1 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(phenylsulfonyl)butyl]-(9CI) (CA INDEX NAME)

RN 434285-58-2 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(methylthio)butyl]- (9CI) (CA INDEX NAME)

RN 434285-59-3 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(methylsulfonyl)butyl]-(9CI) (CA INDEX NAME)

RN 434285-60-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(phenylthio)ethyl]- (9CI) (CA INDEX NAME)

RN 434285-61-7 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(phenylsulfonyl)butyl]- (9CI) (CA INDEX NAME)

RN 434285-62-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(methylsulfonyl)butyl]- (9CI) (CA INDEX NAME)

RN 434285-64-0 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(methylthio)butyl]- (9CI) (CA INDEX NAME)

RN 434285-65-1 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[5-(methylsulfonyl)pentyl](9CI) (CA INDEX NAME)

RN 434285-67-3 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[5-(methylsulfonyl)pentyl](9CI) (CA INDEX NAME)

RN 434285-68-4 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(methylsulfonyl)pentyl]- (9CI)
(CA INDEX NAME)

RN 434285-69-5 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-hexyl-1-[5-(methylsulfonyl)pentyl]-(9CI) (CA INDEX NAME)

RN 434285-70-8 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-(2-methoxyethyl)-1-[5-(methylsulfonyl)pentyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{II} \\ \text{Me-S-} (\text{CH}_2)_5 \\ \text{O} \\ \text{MeO-CH}_2 - \text{CH}_2 \\ \text{II} \\ \text{N} \\ \text{NH}_2 \end{array}$$

RN 434285-71-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[5-(methylthio)pentyl]- (9CI) (CA INDEX NAME)

RN 434285-72-0 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[5-(methylsulfinyl)pentyl]-(9CI) (CA INDEX NAME)

RN 434285-73-1 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(methylsulfonyl)propyl]-(9CI) (CA INDEX NAME)

RN 434285-74-2 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(phenylsulfonyl)propyl](9CI) (CA INDEX NAME)

RN 434285-75-3 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-6,7,8,9-tetrahydro-1-[2-(phenylthio)ethyl]- (9CI) (CA INDEX NAME)

RN 534568-82-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(1-methylethyl)sulfonyl]ethyl]- (9CI) (CA INDEX NAME)

RN 534568-87-1 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-[(1-methylethyl)sulfonyl]butyl]- (9CI) (CA INDEX NAME)

RN 534568-88-2 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(ethylsulfonyl)butyl](9CI) (CA INDEX NAME)

RN 534582-66-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(methylsulfonyl)pentyl]-2-propyl(9CI) (CA INDEX NAME)

RN

RN 534582-68-8 CAPLUS

RN 534582-69-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[3-(methylthio)propyl]- (9CI) (CA INDEX NAME)

RN 534582-70-2 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[3-(methylsulfonyl)propyl]-(9CI) (CA INDEX NAME)

RN 534582-71-3 CAPLUS

534582-72-4 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[4-(methylsulfinyl)butyl]-CN (9CI) (CA INDEX NAME)

534582-73-5 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(methylthio)butyl]- (9CI) CN (CA INDEX NAME)

534582-75-7 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(methylsulfonyl)butyl]-(9CI) (CA INDEX NAME) CN

534582-77-9 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(methylsulfonyl)butyl]-2-propyl-CN (9CI) (CA INDEX NAME)

534582-79-1 CAPLUS RN

lH-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(methylsulfinyl)butyl]-CN (9CI) (CA INDEX NAME)

534582-81-5 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[2-(methylthio)ethyl]- (9CI) CN (CA INDEX NAME)

RN

 $534582-82-6 \quad \text{CAPLUS} \\ 1\text{H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[2-(methylsulfonyl)ethyl]-1-1}$ CN (9CI) (CA INDEX NAME)

534582-86-0 CAPLUS RN

lH-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[2-(methylsulfonyl)ethyl]-CN (9CI) (CA INDEX NAME)

RN 534582-89-3 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-[(2,4-difluorophenyl)thio]butyl]- (9CI) (CA INDEX NAME)

RN 534582-91-7 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-[(2,4-difluorophenyl)sulfonyl]butyl]- (9CI) (CA INDEX NAME)

RN 534582-92-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(ethylsulfonyl)butyl](9CI) (CA INDEX NAME)

RN

534582-93-9 CAPLUS 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-[(1,1-dimethylethyl)thio]butyl]- (9CI) (CA INDEX NAME) CN

RN

534582-94-0 CAPLUS 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-[(4-fluorophenyl)thio]butyl]- (9CI) (CA INDEX NAME) CN

534582-95-1 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-[(4-fluorophenyl)sulfonyl]butyl]- (9CI) (CA INDEX NAME) CN

534582-96-2 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-[(1-CN methylethyl)thio]butyl]- (9CI) (CA INDEX NAME)

534582-97-3 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-[(3,5-dichlorophenyl)thio]butyl]-2-ethyl- (9CI) (CA INDEX NAME) CN

534582-98-4 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(cyclopentylsulfonyl)butyl]-2-ethyl- (9CI) (CA INDEX NAME) CN

RN 534582-99-5 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-[(3,5-dichlorophenyl)sulfonyl]butyl]-2-ethyl- (9CI) (CA INDEX NAME)

RN 534583-00-1 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(cyclohexylthio)butyl]-2-ethyl(9CI) (CA INDEX NAME)

RN 534583-01-2 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(butylthio)butyl]-2-ethyl- (9CI) (CA INDEX NAME)

534583-02-3 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-[(4-chlorophenyl)thio]butyl]-2-ethyl- (9CI) (CA INDEX NAME) CN

534583-03-4 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(butylsulfonyl)butyl]-2-ethyl-(9CI) (CA INDEX NAME)

RN

534583-04-5 CAPLUS
1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-[(4-fluorophenyl)thio]butyl]- (9CI) (CA INDEX NAME) CN

534583-05-6 CAPLUS RN

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(ethylthio)butyl]- (9CI) (CA INDEX NAME)

534583-06-7 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(cyclohexylsulfonyl)butyl]-2-ethyl-(9CI) (CA INDEX NAME)

RN

534583-07-8 CAPLUS
1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(phenylsulfonyl)ethyl]-(9CI) (CA INDEX NAME) CN

FN 534583-08-9 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(4-fluorophenyl)sulfonyl]ethyl]- (9CI) (CA INDEX NAME)

RN 534583-09-0 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(1,1-dimethylethyl)sulfonyl]ethyl]- (9CI) (CA INDEX NAME)

RN 534583-10-3 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(1,1-dimethylethyl)thio]ethyl]- (9CI) (CA INDEX NAME)

534583-11-4 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(propylsulfonyl)ethyl]-(9CI) (CA INDEX NAME)

534583-12-5 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(propylthio)ethyl]- (9CI) CN (CA INDEX NAME)

RN

534583-13-6 CAPLUS 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(2-CN methylpropyl)sulfonyl]ethyl]- (9CI) (CA INDEX NAME)

534583-14-7 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(2-methylpropyl)thio]ethyl]- (9CI) (CA INDEX NAME) CN

RN 534583-15-8 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(ethylsulfonyl)ethyl]-CN (9CI) (CA INDEX NAME)

RN 534583-16-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(ethylthio)ethyl]- (9CI) (CA INDEX NAME)

RN 534583-17-0 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(methylsulfonyl)ethyl]-(9CI) (CA INDEX NAME)

RN 534583-46-5 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[6-(methylsulfonyl)hexyl]-(9CI) (CA INDEX NAME)

RN 534583-96-5 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(phenylsulfonyl)pentyl]- (9CI) (CA INDEX NAME)

RN 534584-60-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(methylsulfonyl)pentyl]-2(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 534585-79-0 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-(2-methoxyethyl)-1-[5-(phenylsulfonyl)pentyl]- (9CI) (CA INDEX NAME)

RN 534585-85-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(2-pyrimidinylthio)butyl](9CI) (CA INDEX NAME)

534585-88-1 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(2-pyrimidinylsulfonyl)butyl]- (9CI) (CA INDEX NAME) CN

534585-90-5 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 6,7,8,9-tetrahydro-2-methyl-1-[4-(methylsulfonyl)butyl]- (9CI) (CA INDEX NAME) CN

RN

534585-92-7 CAPLUS
1H-Imidazo[4,5-c]quinolin-4-amine, 6,7,8,9-tetrahydro-2-methyl-1-[5-(methylsulfonyl)pentyl]- (9CI) (CA INDEX NAME) CN

RN

534585-94-9 CAPLUS
1H-Imidazo[4,5-c]quinolin-4-amine, 6,7,8,9-tetrahydro-2-methyl-1-[4-[(1-methylethyl)sulfonyl]butyl]- (9CI) (CA INDEX NAME)

534585-96-1 CAPLUS
1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-[(4-fluorophenyl)sulfonyl]butyl]-6,7,8,9-tetrahydro-2-methyl- (9CI) (CA INDEX NAME)

RN

534585-98-3 CAPLUS
1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-[(1,1-dimethylethyl)sulfonyl]butyl]-6,7,8,9-tetrahydro-2-methyl- (9CI) (CA CN

RN

534588-03-9 CAPLUS 1H-Imidazo[4,5-c]quinolin-4-amine, 2-(ethoxymethyl)-6,7,8,9-tetrahydro-1-[4-(methylsulfonyl)butyl]- (9CI) (CA INDEX NAME) CN

434286-34-7P, 2-Butyl-1-[3-(methylthio)propyl]-1H-imidazo[4,5c]quinolin-4-amine 434286-35-8P, 2-Butyl-1-[3-(phenylthio)propyl]-1H-imidazo[4,5-c]quinolin-4-amine 534586-60-2P 1-[5-(Methylthio)pentyl]-2-propyl-1H-imidazo[4,5-c]quinoline-4-amine 534586-86-2P, 1-[4-(Methylthio)butyl]-2-propyl-1H-imidazo[4,5c]quinolin-4-amine 534587-09-2P, 2-Butyl-1-[2-(methylthio)ethyl]-1H-imidazo[4,5-c]quinolin-4-amine 534587-17-2P, 2-Methyl-1-[6-(methylthio)hexyl]-1H-imidazo[4,5-c]quinolin-4-amine RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of thioether substituted imidazoquinolinamines as cytokine biosynthesis inducers for treatment of viral and neoplastic disease) 434286-34-7 CAPLUS RN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(methylthio)propyl]- (9CI) CN (CA INDEX NAME)

RN 434286-35-8 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(phenylthio)propyl]- (9CI) (CA INDEX NAME)

RN 534586-60-2 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(methylthio)pentyl]-2-propyl(9CI) (CA INDEX NAME)

RN 534586-86-2 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(methylthio)butyl]-2-propyl- (9CI)

(CA INDEX NAME)

RN 534587-17-2 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[6-(methylthio)hexyl]- (9CI)
(CA INDEX NAME)

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ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
L4
AN
     2002:449683 CAPLUS
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     137:20377
     Preparation of 1-(alkyl- or arylthioalkyl) imidazo[4,5-c]quinoline-4-
TT
     amines and analogs as cytokine biosynthesis inducers
     Dellaria, Joseph F.; Merrill, Bryon A.; Radmer, Matthew R.
     3M Innovative Properties Company, USA
PA
     PCT Int. Appl., 66 pp.
SO
     CODEN: PIXXD2
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                                              APPLICATION NO.
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,

KG, KZ, MD, RU

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CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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      US 2001-11921
                           A1
                                  20011206
                                  20011206
      WO 2001-US46697
                           W
      MARPAT 137:20377
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Title compds. [(un)substituted I; R = Z2Z1R1; R1 = alk(en)yl, heterocyclyl, (hetero)aryl, etc.; R2 = H, alk(en)yl, heterocyclyl, (hetero)aryl, etc.; R3 = NH2; Z1 = SOO-2; Z2 = alkylene; dashed lines = optional addnl. bonds], useful as immune response modifiers, were prepared Thus, 4-chloro-3-nitroquinoline was aminated by H2N(CH2)4OH and O-protected product reduced to give, after cyclocondensation with BuC(OMe)3, I (R2 = Bu, dashed lines = bonds)[II; R = (CH2)4OSiCMe2CMe3, R3 = H] which was converted in 4 steps to II [R = (CH2)4SPh, R3 = NH2]. Data for biol. activity of I were given.

IT 434285-63-9P

RN

CN

434285-63-99
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of 1-(alkyl- or arylthicalkyl) imidazo[4,5-c]quinoline-4-amines and analogs as cytokine biosynthesis inducers)
434285-63-9 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(phenylthio)butyl]- (9CI) (CA INDEX NAME)

IT 434285-55-9P 434285-56-0P 434285-57-1P
434285-58-2P 434285-59-3P 434285-60-6P
434285-61-7P 434285-62-8P 434285-64-0P
434285-65-1P 434285-66-2P 434285-67-3P
434285-68-4P 434285-69-5P 434285-70-8P
434285-71-9P 434285-72-0P 434285-73-1P
434285-74-2P 434285-75-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 1-(alkyl- or arylthioalkyl) imidazo[4,5-c]quinoline-4-amines and analogs as cytokine biosynthesis inducers)

RN 434285-55-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(phenylthio)butyl]- (9CI) (CA INDEX NAME)

RN 434285-56-0 CAPLUS

The IH-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-6,7,8,9-tetrahydro-1-[2-(phenylthio)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HC1

RN 434285-57-1 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(phenylsulfonyl)butyl]-(9CI) (CA INDEX NAME)

RN 434285-58-2 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(methylthio)butyl]- (9CI) (CA INDEX NAME)

RN 434285-59-3 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(methylsulfonyl)butyl]-

(9CI) (CA INDEX NAME)

RN 434285-60-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(phenylthio)ethyl]- (9CI) (CA INDEX NAME)

RN 434285-61-7 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(phenylsulfonyl)butyl]- (9CI) (CA INDEX NAME)

RN 434285-62-8 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(methylsulfonyl)butyl]- (9CI) (CA INDEX NAME)

RN 434285-64-0 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(methylthio)butyl]- (9CI) (CA INDEX NAME)

RN 434285-65-1 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[5-(methylsulfonyl)pentyl]-(9CI) (CA INDEX NAME)

RN 434285-66-2 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[5-(methylsulfonyl)pentyl](9CI) (CA INDEX NAME)

RN 434285-67-3 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[5-(methylsulfonyl)pentyl](9CI) (CA INDEX NAME)

RN 434285-68-4 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(methylsulfonyl)pentyl]- (9CI)
(CA INDEX NAME)

RN 434285-69-5 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-hexyl-1-[5-(methylsulfonyl)pentyl](9CI) (CA INDEX NAME)

RN 434285-70-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-(2-methoxyethyl)-1-[5-(methylsulfonyl)pentyl]- (9CI) (CA INDEX NAME)

RN 434285-71-9 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[5-(methylthio)pentyl]- (9CI) (CA INDEX NAME)

RN 434285-72-0 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[5-(methylsulfinyl)pentyl](9CI) (CA INDEX NAME)

RN 434285-73-1 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(methylsulfonyl)propyl]-(9CI) (CA INDEX NAME)

RN 434285-74-2 CAPLUS .
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(phenylsulfonyl)propyl](9CI) (CA INDEX NAME)

RN 434285-75-3 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-6,7,8,9-tetrahydro-1-[2-(phenylthio)ethyl]- (9CI) (CA INDEX NAME)

RN

IT 434286-34-7P 434286-35-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of 1-(alkyl- or arylthioalkyl) imidazo[4,5-c]quinoline-4-amines and analogs as cytokine biosynthesis inducers) 434286-34-7 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(methylthio)propyl]- (9CI) (CA INDEX NAME)

RN 434286-35-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(phenylthio)propyl]- (9CI)
(CA INDEX NAME)

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